

PATENT

IPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

THE APPLICATION OF:

REBECCA E. CAHOON ET. AL.

CASE NO.: BB1295USCNT

APPLICATION NO.: 10/690994

CONFIRMATION NO.:

GROUP ART UNIT: 1638

EXAMINER: UNKNOWN

FILED: OCTOBER 21, 2003

FOR: PLANT DIACYLGLYCEROL ACYLTRANSFERASES

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08 and PTO-892 forms.

Benefit of the earlier filing date of U.S. Patent Application No. 09/856,018, filed May 16, 2001 is claimed under 35 U.S.C. 120 for the above-referenced application and only copies of information not previously made of record in the parent are enclosed.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

EMIL M. OROZCO, JR.
AGENT FOR APPLICANTS
Registration No.: 50,823
Telephone: (302) 695-3121
Facsimile: (302) 695-3125

Dated: July 20, 2004

Enclosures

Please type a plus sign (+) inside this box

→ +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/31/2002. GMB 0551-055
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PATE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number	10/690994
Filing Date	October 21, 2003
First Named Inventor	Edgar B. Cahoon et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1295 USCNT

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
		World	97/45439	A1	The Trustees of Columbia University in the City of New York	12-04-1997	
		World	99/67403	A1	The Regents of the University of California	12-29-1999	
		World	99/63096	A2	Calgene LLC	12-09-1999	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

[REDACTED] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Jul 28 2004
O I P E JCB
P A T E N T & T R A D E M A R K
S U B M I T T E R
Please type a plus sign (+) inside this box →

PTO/SB/08B(08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of 3

Complete if Known

Application Number	10/690994
Filing Date	October 21, 2003
First Named Inventor	Edgar B. Cahoon et al.
Group Art Unit	Unknown
Examiner Name	Unknown

Attorney Docket Number BB1295 USCNT

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

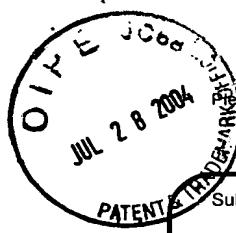
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. ²	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC0064579, 08-01-1998, ROUNSLEY, S.D. ET AL., Putative Acyl-COA: Cholesterol Acyltransferase	
		PETER OELKERS ET AL., J. Biol. Chem., vol. 273(41):26765-26771, 1998, Characterization of Two Human Genes Encoding Acyl Coenzyme A: Cholesterol Acyltransferase-related Enzymes	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC005917, X. LIN ET AL., 11-04-1998, Sequence and analysis of chromosome II of Arabidopsis thaliana	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AC003058, S.D. ROUNSLEY ET AL., 11-18-1997, Sequence and analysis of chromosome II of Arabidopsis thaliana	
		RANDALL J. WESELAKE ET AL., J. Exp. Bot., vol. 49(318):33-39, 1998, Triacylglycerol biosynthesis and gene expression in microspore-derived cell suspension cultures of oilseed rape	
		DAWN LITTLE ET AL., Biochem. J., vol. 304:951-958, 1994, Solubilization and characterization of diacylglycerol acyltransferase from microspore-derived cultures of oilseed rape	
		FERMIN PACHECO-MOISES ET AL., Plant Physiol., vol. 114:1095-1101, 1997, Regulation of Acyltransferase Activity in Immature Maize Embryos by Abscisic Acid and the Osmotic Environment	
		SYLVAINE CASES ET AL., Proc. Natl. Acad. Sci., vol. 95:13018-13023, 10/1998, Identification of a gene encoding an acyl CoA:diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis	
		MARGRIT FRENTZEN, Fett-Lipid, vol. 100:161-166, 1998, Acyltransferases from basic science to modified seed oils	
		KEN'ICHI ICHIHARA ET AL., Biochimica et Biophysica Acta, vol. 958:125-129, 1988, Diacylglycerol acyltransferase in maturing safflower seeds: Its influences on the fatty acid composition of triacylglycerol	
		CORY L. NYKIFORUK ET AL., Plant Physiol., vol. 121(3):1053, 1999, Isolation and characterization of a cDNA encoding a second putative diacylglycerol acyltransferase from a Microspore-Derived cell suspension culture of Brassica napus L. cv Jet Neuf (ACCESSION NO. AF164434) (PGR 99-158)	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box →

PTO/SB/08B(08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

.2

of

3

Complete if Known

Application Number	10/690994
Filing Date	October 21, 2003
First Named Inventor	Edgar B. Cahoon et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1295 USCNT

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

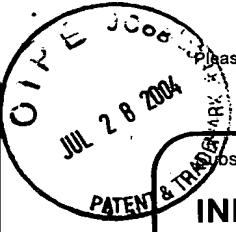
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		DOUGLAS H. HOBBS ET AL., FEBS Letters., vol. 452:145-149, 1999, Cloning of a cDNA encoding diacylglycerol acyltransferase from <i>Arabidopsis thaliana</i> and its functional expression	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: Q9XGR5, 11-01-1999, C.L. NYKIFORUK ET AL., A cDNA exhibiting high homology to diacylglycerol acyltransferase (DGAT) in a microspore-derived cell suspension culture from <i>Brassica napus</i> cv. Jet Neuf	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: Q9S7F2, 05-01-2000, J. ZOU ET AL., The <i>Arabidopsis thaliana</i> TAG1 gene encodes for a diacylglycerol acyltransferase	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO: AJ238008, 06-18-1999, J. ZOU ET AL., The <i>Arabidopsis thaliana</i> TAG1 gene encodes for a diacylglycerol acyltransferase	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135275, 05-16-1998, ROUNSLEY, S.D. ET AL., <i>Arabidopsis thaliana</i> chromosome II BAC F27F23 genomic sequence	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135276, 05-16-1998, ROUNSLEY, S.D. ET AL., <i>Arabidopsis thaliana</i> chromosome II BAC F27F23 genomic sequence	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3746533, 10-15-1998, P. OELKERS ET AL., Characterization of two human genes encoding acyl coenzyme A: cholesterol acyltransferase-related enzymes	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3859934, 11-11-1998, S. CASES ET AL., Identification of a gene encoding an acyl CoA:diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 5050913, 06-10-1999, D.H. HOBBS ET AL., Cloning of a cDNA encoding diacylglycerol acyltransferase from <i>Arabidopsis thaliana</i> and its functional expression	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 5579408, 11-30-1999, C. L. NYKIFORUK ET AL., Isolation and characterization of a cDNA encoding a second putative diacylglycerol acyltransferase from a Microspore-derived cell suspension culture of <i>Brassica napus</i> L.	
		JOSEPH J. KIEBER ET AL., Cell, vol. 72:427-441, 1993, CTR1, a Negative Regulator of the Ethylene Response Pathway in <i>Arabidopsis</i> , Encodes a Member of the Raf Family of Protein Kinases	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3135250, 05-16-1998, S. D. ROUNSLEY ET AL., <i>Arabidopsis thaliana</i> chromosome II BAC F27F23 genomic sequence	
		MARIA ANDERSSON ET AL., J. Lipid Res., vol. 35:535-545, 1994, Purification of diacylglycerol:acyltransferase from rat liver to near homogeneity	
		BEVERLY HAY AND JAY M. SHORT, Strategies, VOL. 5:16-18, 1992, ExAssist™ Helper Phage and SOLR™ Cells for Lambda ZAP(R) II Excisions	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box

→ +

PTO/SB/08B(08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
It is illegal to use a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet 3 of 3

<i>Complete if Known</i>	
Application Number	10/690994
Filing Date	October 21, 2003
First Named Inventor	Edgar B. Cahoon et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1295 USCNT

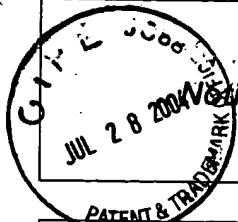
OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.


Office of References Cited

Application/Control No.

09/856,018

 Applicant(s)/Patent Under
Reexamination
CAHOON ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

Page 1 of 2

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
A	US-			
B	US-			
C	US-			
D	US-			
E	US-			
F	US-			
G	US-			
H	US-			
I	US-			
J	US-			
K	US-			
L	US-			
M	US-			

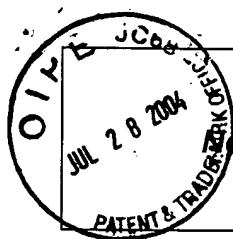
FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
N					
O					
P					
Q					
R					
S					
T					

NON-PATENT DOCUMENTS

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)		
U	De-Luca, V. AgBiotech News and Information 5 (6): 225N-229N, 1993		
V	Van de Loo et al, PNAS USA 92: 6743-6747, July 1995		
W	Broun et al, Science 282: 131-133, 13 November 1998		
X	Doerks et al, TIG 14 (6): 248-250, June 1998		

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



Notice of References Cited

Application/Control No.

09/856,018

Applicant(s)/Patent Under

Reexamination

CAHOON ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

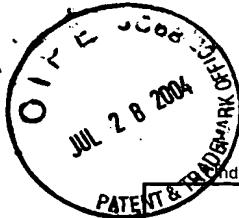
FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Smith et al, Nature Biotechnology 15: 1222-1223, November 1997
	V	Brenner, S. E., TIG 15 (4): 132-133, April 1999
	W	Bork et al, TIG 12 (10): 425-427, October 1996
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on July 26, 2004
Date

Melissa McCullin
Signature

MELISSA MCCULLIN

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

10/690994

BB1295USCNT

INFORMATION DISCLOSURE STATEMENT

PTO/SB/08A FORMS (1)

PTO/SB/08B FORMS (3)

PTO-892 FORMS (2)

POSTCARD

References (8)

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.